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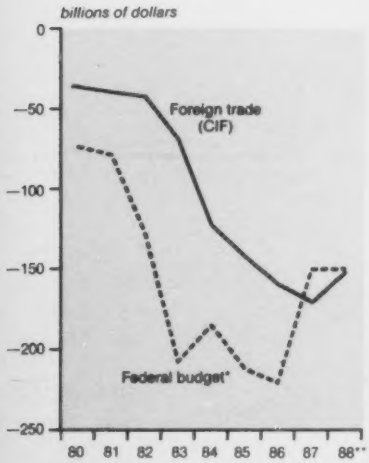
The twin U.S. deficits



*Fiscal year data, unified basis
**Estimated

Reducing the twin U.S. deficits

U.S. economic growth, interest rates, and the dollar in the next few years will be determined largely by how the next U.S. President and Congress deal with the nation's notorious twin deficits in foreign trade and the federal budget. A constructive beginning was made last year in reducing both. The trade deficit shrank a bit in volume terms and the federal budget deficit dropped fully one-third (see Chart 1). There should be further progress in 1988, this time more visibly on trade.

Even so, less than a quarter of the trade adjustment will have been accomplished by the end of this year. Evidently, the twin deficits still will bestride the economic and financial scene in 1989 and beyond, setting the next President and Congress a challenging test. How they will score cannot now be predicted, but should they fail, the financial market reaction could jeopardize continued economic expansion.

The economic legacy of the Reagan years includes some major pluses. The unemployment rate has fallen to its lowest in almost ten years, 15 million jobs have been created, and the inflation rate has dropped from 13.5% in 1980 to 3.9% in the twelve months through March 1988. In addition, U.S. manufacturing has achieved much better productivity growth than in the late 1970s.

But there have been minuses too. Most of the now nearly six years of U.S. expansion have been led by domestic private and public consumption, whose growth eclipsed that of domestic output. In the first years of the recovery, strong domestic demand joined with a more favorable tax and regulatory environment to heighten the appeal of investment in the United States, for both residents and foreigners. The dollar climbed in response, raising the prices of U.S.-produced goods relative to those of foreign goods. The upshot: a surge in imports and a drop in exports, both compounded by an excess of domestic investment over domestic savings.

The savings shortfall has implied huge and still-continuing foreign trade and current account deficits. These, in turn, are piling up large-scale net external

liabilities. To date, the interest cost of servicing this debt has been modest — in net terms, only 0.2% of GNP in 1987. But, were the net external liabilities to continue to rise each year by 3.6% of GNP, as they did in 1987 when the current account deficit reached $160 billion, the interest cost eventually would become a material drain on U.S. living standards.

There is a link, albeit erratic and indirect, between the twin deficits. By definition, the private-sector deficit (investment minus savings) plus the public-sector deficit (spending minus revenue) equals the external trade deficit in goods and services. Typically during economic expansions, an increase in investment relative to private saving is offset by a reduction in government dissaving as tax receipts rise in tandem with faster income growth. By contrast, during the current expansion, federal government dissaving rose sharply through FY1986. Total domestic saving, government and private, therefore fell far short of investment, and the current account plunged deep into deficit. None too soon, the federal budget deficit came down substantially in FY1987. The trade deficit in real terms came down too, but only a little.

Both market forces and political considerations demand that the U.S. trade deficit shrink in dollar as well as volume terms. If the deficit is to narrow steadily, total domestic saving must be increased and consumption growth held well below potential real GNP growth, with the slack taken up by business investment and net exports.

Some of these ingredients seem to be in place this year. The combined growth in private consumption, government spending, and residential construction appears quite modest at present, while business investment is vigorous. Attaining satisfactory overall GNP growth depends on a continuing boost from net foreign demand. Sustaining it hinges on the pace of economic growth at home and abroad and the degree of improvement in U.S. competitiveness brought about principally by the lower dollar and cost containment.

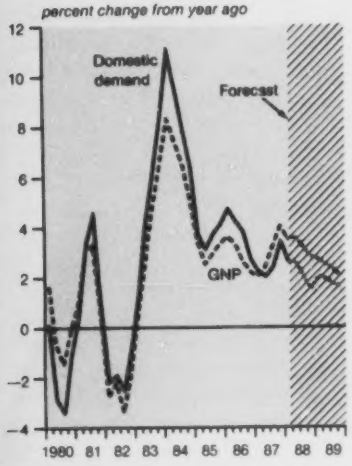
Two dangers are paramount in the U.S. economic outlook. First, if foreign economic growth falters or the dollar still has not come down to a fully competitive level, the external stimulus to the U.S. economy will be disappointingly slight, or even negative. U.S. growth then would suffer directly, but also indirectly through the upward pressure on interest rates that would be the markets' price for inadequate progress on the trade deficit.

The second, but opposite, danger is that domestic demand will prove too strong. That would drive import growth higher and inhibit trade adjustment. Moreover, incremental export demand then could place too much pressure on U.S. resources, overheat the economy, and breed accelerating inflation. This spring's fear of inflation has inspired higher interest rates and a marked steepening of the yield curve. There could even be some replay of last year's financial market instability, with the possibility of much higher interest rates ultimately triggering recession.

Avoiding both dangers will be quite a challenge for U.S. policymakers. They have little influence on the course of economic growth abroad. They instead

Chart 2

GNP versus domestic demand



would do well to concentrate on engineering a suitably restrained path for domestic demand. For now, monetary policy is the only available instrument but, once the elections are over, the objective of continued growth with adjustment would be better served by a switch in the policy mix toward fiscal restraint, implementing the Gramm-Rudman-Hollings mandate.

Despite its disquiet at the chronic twin deficits, the public at large is not eager for major sacrifice. The analysis below shows that fortunately the required sacrifice need not entail an outright drop in living standards nor surging inflation. Full employment plus a new Administration and Congress in 1989 provide the opening for decisive fiscal action. It should be welcomed at home and abroad.

1987-88: adjustment begins

In 1987 the U.S. economy began to exhibit a pattern of growth consistent with continued expansion and simultaneous trade adjustment. Despite a marked slowdown in domestic demand, notably in personal consumption, government purchases, and residential construction, real GNP accelerated (see Chart 2). Business fixed investment rose 5.1% in real terms (fourth quarter to fourth quarter) after declining a like amount in 1986. For the first time since 1980, net exports contributed positively, to the tune of 0.3% of GNP.

Worsening of the terms of trade, however, caused the nominal trade deficit to widen, by some $10 billion to a record $171 billion on the CIF valuation. In addition, U.S. net investment income deteriorated by $7 billion, reflecting higher interest on net foreign debt and taking the current account deficit above $160 billion, $20 billion higher than in 1986 (see Table 1). Still, the shift in the pattern of growth last year provides cause for cautious optimism that trade adjustment can proceed in 1988, even as GNP expansion is maintained. The contribution to growth from improving net exports could be another 0.3% of GNP this year, enough to provide a $20 billion reduction in the nominal trade deficit and a token $3 billion cut in the current account deficit.

The relative price and income changes bred by the dollar's depreciation have played the principal roles in initiating the shift in the U.S. growth pattern. In broad real effective terms, the dollar has come down 25% from its first-quarter 1985 peak and even has dipped some 2% below its 1980 average level. Significant relative price adjustment is occurring as a result. From 1985 through the first quarter of 1987, import prices for capital goods rose 16% relative to export prices. The corresponding figure for automobiles was 13% and for consumer goods around 10% (see Table 2). Besides dollar depreciation, compensation and productivity trends are benefiting the competitiveness of U.S. manufacturers. Hourly compensation has grown less in U.S. manufacturing than in most other industrial countries since 1980. And, whereas U.S. productivity growth had been much inferior to that achieved by many foreign rivals, U.S. performance has compared quite favorably on average since 1982.

All this has boosted export volumes, which advanced by 15% in 1987 — the strongest rise since 1974. They accelerated to

Table 1

Balance of payments

billions of dollars

	1986	*1987*	*1988*
Exports	227	253	307
Imports (CIF)	—383	—424	—459
Trade balance (CIF)	—156	—171	—152
Direct investment income	31	35	30
Interest income	—10	—20	—30
Other services and transfers	—6	—5	—6
Current account	—141	—161	—158
Private capital	84	84	
Official capital	33	55	
Errors and omissions	24	22	
Memo			
Net external assets, year-end	—264	—430	—600

Table 2

Export and import prices

fixed-weight deflators, 1980=100

	1985	*1988 Q1*
Capital goods		
Imports	86.8	103.0
Exports	114.2	117.0
Relative import price	0.76	0.88
Autos		
Imports	127.1	152.4
Exports	134.5	141.6
Relative import price	0.95	1.08
Consumer durables		
Imports	95.8	114.9
Exports	103.3	109.7
Relative import price	0.93	1.05
Consumer nondurables		
Imports	108.4	127.2
Exports	106.5	114.9
Relative import price	1.02	1.11

Table 3

Export and import volumes

percent change

	Average 1983-86	*Year ended 1988 Q1*	*$ billions annual rate 1988 Q1*
Total exports	5.6	22.0	292.4
Foods, feeds, beverages	—5.4	28.9	29.2
Industrial supplies	2.8	13.2	76.8
Capital goods, nonauto	10.0	33.0	105.6
Autos	8.0	17.9	31.2
Consumer goods	—0.2	25.0	20.8
Other	15.3	—0.4	28.8
Total imports	14.2	11.1	437.2
Foods, feeds, beverages	7.1	3.4	26.4
Industrial supplies, non-oil	9.7	4.1	75.1
Petroleum and products	7.0	24.3	42.2
Capital goods, nonauto	26.9	27.3	97.6
Autos	15.9	—3.9	82.8
Consumer goods	16.0	3.9	92.8
Other	10.9	—1.6	20.4

26% annual growth during the second half of the year when economic growth was particularly rapid abroad. Export volume gains should again be on the order of 15% in 1988. Optimism here relies on the fact that the strength in exports has been broad-based to date, encompassing every major class of goods and all major export markets (see Tables 3 and 4). Moreover, the dollar has come down another 7% in broad real effective terms since last October, the drop delivering a further boost to the competitive fortunes of U.S. producers in international markets. Continued rapid growth in exports this year implies that U.S. manufacturers will regain another slice of the 25 percentage point or more fall in world market share they suffered in volume terms during the years of dollar appreciation. Even so, market share recovery will remain incomplete.

Harder to fathom is the slow U.S. headway in adjusting imports. Import volume growth dropped to just under 6% in 1987 from a 16% annual rate over the previous four years (see Chart 3). But 1987 import growth still was above the 3.4% growth of domestic spending. Thus the tendency toward ever-increasing import penetration has not been arrested for the U.S. economy in the aggregate. Even so, for imports generally, 1988 is likely to see some further slowing in volume growth, as a greater proportion of the dollar's decline shows up in higher import prices.

U.S. industry is a clear beneficiary of the more favorable trend in foreign trade. Industrial output rose 5.8% in 1987, after rising just 1.5% on average in 1985 and 1986. Half the 1987 increase went directly for export, while much of the remainder likely was induced by the strength of exports.

Another year of above-trend growth in domestic production looks in store for 1988 (see Table 5). Manufacturers' unfilled factory orders are more than 11% above their year-ago levels. Their steady growth since early last year reflects the continued inability of shipments to keep pace with orders, and suggests a need for expanded capacity. Manufacturers increasingly have felt the need to step up plant and equipment investment, so that between the first quarter of 1987 and the first of 1988 business fixed investment rose 15%. Orders data point to continuing strength in plant and equipment investment. Though accounting for only 16% of total factory orders, nondefense capital goods have contributed more than half the past year's increase. Besides, the Department of Commerce's January-March survey of plant and equipment spending intentions for 1988 revealed that businesses plan an 8% increase over the 1987 level in inflation-adjusted terms.

As was prerequisite to trade adjustment, domestic demand components other than business investment turned subdued in 1987. Investment in residential construction was flat, following average annual gains of 15% over the previous four years, high vacancy rates and tax reform depressed construction of multifamily units, while higher interest rates slowed the housing industry in general. The federal government tightened its finances, with its FY1987 outlays rising only 1.4%, the smallest gain in over twenty years. Adjusted for one-time factors, the

Table 4

Exports by destination

billions of dollars at annual rates

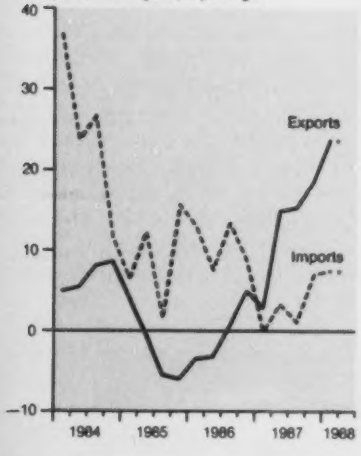
	Jan-Feb 1987	Jan-Feb 1988	% change
Total	217	275	27
Exports to			
Western Europe	64	79	24
Canada	53	61	13
Japan	23	34	47
*Asian NICs**	19	28	51
Mexico and Brazil	15	19	28
OPEC	9	12	40
Other	34	42	24

*Hong Kong, Korea, Singapore, and Taiwan.

Chart 3

U.S. import and export volumes

percent change from year ago



*January-February average

budgetary posture provided demand restraint of about 0.7% of GNP, and should be similarly restrictive in the current fiscal year.

The tighter policy stance helped explain the slowing of private consumption last year. Whereas consumer spending accounted for nearly three-quarters of the rise in real GNP from the end of 1982 through the end of 1986, it accounted for only one-sixth last year. Weakness in consumer spending is both an integral part of the trade adjustment process and a reflection of it. Spending on goods — typically more tradable than services — actually declined in 1987. And dollar depreciation contributed to inflation high enough that 1987's 5.3% gain in nominal disposable income delivered little increase in real purchasing power.

Moreover, personal saving moved higher with the drop in consumer confidence and wealth following the stock market crash. This precipitated an outright decline in real consumer spending in the final quarter of the year, leading to optimism that the trade deficit would take a sizable turn for the better in the early months of 1988. Instead, February's figures revealed an unexpectedly high deficit thanks to a stiff increase in imports concentrated in capital goods. Financial market reaction to the news was swift and harsh. Adjustment optimism had given way to doubt.

Adjustment risks

There are external and internal risks to the smooth working of the adjustment process. On the *external* side, U.S. adjustment could prove such a drag on the world economy that U.S. export growth will fade as foreign markets flag; or the still-rising import penetration of the U.S. economy may reveal a need for further dollar depreciation to enhance U.S. competitiveness. Either way, U.S. economic growth would lose out by an unexpectedly modest boost from net foreign demand. The *internal* risk is that domestic demand may expand too fast, leaving insufficient room for net exports to rise and driving inflation higher as the economy overheats. That would call for corrective recession.

The first external risk is not particularly worrisome at present. The current growth outlook for most major U.S. export markets in 1988 is moderately favorable (see Table 6), even though their growth will be slower than in the second half of last year. Real GNP growth in Canada, the largest U.S. trade partner, is expected to retreat from the 6% annual-rate growth of the second half of 1987 to perhaps 2.5% toward the end of this year, due partly to a stronger currency and higher interest rates. In Japan, growth approached 6% in last year's second half and appears to have continued at a fast clip through the winter months. But the distinct slowing that is now apparent in housing starts (in seasonally adjusted terms) and the phaseout of the higher public spending provided by the mid-1987 fiscal stimulus are likely to bring down Japan's growth to little more than 2% in the second half of this year. A similar pattern of slowing — but still solid — growth holds for the Asian NICs and for Britain.

Stubbornly high import penetration is less reassuring from an adjustment perspective. The huge and fairly open U.S. market holds unrivaled attractions to

Table 5

Real GNP and components

percent changes at annual rates, calendar year averages

	Actual		Forecast	
	1983-1986	1987	1988	1989
Real GNP	4.1	2.9	3.4	2.5
Consumption	4.6	1.9	2.4	2.8
Goods	5.3	0.3	1.2	2.0
Services	3.7	3.5	3.5	3.5
Government purchases	4.1	2.3	1.5	1.1
Federal	5.1	1.1	0.0	—0.6
State and local	3.4	3.2	2.6	2.5
Residential investment	16.9	0.0	—2.4	—2.2
Business fixed investment	4.9	1.0	12.3	3.9
Exports	1.0	12.8	13.1	8.4
Imports	11.7	7.3	7.8	4.5
Contributions to GNP growth				
Domestic final sales	5.0	1.8	3.1	2.4
Inventory investment	0.3	0.8	0.0	—0.3
Net exports	—1.4	0.3	0.3	0.4
Memo item				
CPI	3.2	3.7	4.0	4.9

Table 6

Real GNP

percent change

	Year average		Year to
	1987	1988	1988Q4
United States	2.9	3.4	3.1
Japan	4.2	4.5	3.1
Western Europe	2.5	2.3	1.5
Germany	1.7	2.0	0.8
France	2.0	2.2	1.6
Italy	3.1	2.2	2.0
United Kingdom	4.3	3.2	2.5
Canada	4.0	3.2	2.3
Mexico	1.3	2.0	2.5
Hong Kong	13.6	8.0	5.0
Korea	12.2	9.5	7.0
Taiwan	11.0	8.5	7.5

producers around the world. Many seized the opportunity, as the dollar rose from 1980 through 1985, to develop and expand U.S. market share while earning high profits too — U.S. import prices eroded much less than the dollar's appreciation might have warranted. Since the dollar went into decline, many of the profits have been sacrificed for the sake of U.S. market share. Thus only a fraction of the dollar's fall has been "passed through" in the form of import price increases. Though the pace has picked up in the past year or so, overall nonpetroleum import prices have increased at an annual average of only 4%-5% since late 1985 — not much faster than domestic prices, thanks to small increases, or even declines, in prices of imported raw materials and electronic equipment and components.

With global production increasingly mobile, many such imports come from the NICs. In the successful cases, local enterprises — or affiliates of U.S. and other foreign firms — harness low labor costs to increasingly sophisticated technology, achieving rapid productivity gains in large-scale output intended principally for export.

Hardly any of these countries has let its currency appreciate significantly against the dollar (see Table 7). Hong Kong's currency is actually pegged to the dollar. The Korean won remains 12% below its 1980 value in real bilateral terms against the dollar, although some of that competitive gain now may erode through a combination of domestic wage pressure and modest nominal appreciation against the dollar compelled by Korea's burgeoning current account surplus. Though up sharply in the past two years, even Taiwan's currency is above its 1980 level in real bilateral terms against the dollar, despite a long-standing current account surplus that hit 19% of GNP in 1987 and that may decline little this year if gold imports are excluded (as they should be). As wage levels in Hong Kong, Korea, and Taiwan rise in dollar terms, each must inevitably cede less-profitable product lines to lower cost areas — to China, Mexico, or other countries in Asia, Latin America, and the Caribbean. Yet the principal Asian NICs still will have advantages over Japan, Europe, and the United States for production of many items that are beyond the present capabilities in countries offering lower hourly wage costs. Thus, for a wide range of manufactured goods, U.S. import sources will continue to shift and import prices will be held down by competition for U.S. market share.

Japanese and European producers still are very much part of that competition; in dollar terms U.S. imports from Japan were up 6% in January-February from year-earlier levels, and from Europe were up 12%. For high-volume products, direct investment in U.S. production facilities may be the logical relief from currency pressure. By contrast, direct exporting to the United States is the preferred approach in more customized, lower-volume lines such as capital goods. Successful efforts to effect home-base productivity gains and other cost savings are said to have enabled Japanese and German producers to become fairly comfortable with current dollar exchange rates.

That likely is one reason why rising import penetration of the U.S. market now is evident chief-

Table 7

*Dollar cost of foreign currencies**

	April 1988, percent change from	
	1980 average	1985Q1
Currency of		
Japan	33	79
Germany	2	87
United Kingdom	—2	80
Canada	4	15
Mexico	—12	6
Hong Kong	—13	12
Korea	—12	14
Taiwan	—5	20

*Inflation adjusted using wholesale prices of manufactures excluding food and fuel.

Table 8

Producer prices

percent change

	Year to Mar 1988
All finished goods	1.8
Intermediate materials, supplies, and components	5.0
Crude materials for further processing	4.2
Selected intermediate prices	
Processed yarns and threads	6.5
Finished fabrics	5.8
Industrial chemicals	9.3
Phosphates	12.5
Paper	9.4
Paperboard	10.0
Steel mill products	7.3
Selected crude prices	
Iron ore	—3.7
Iron and steel scrap	57.6
Logs and timber	22.8
Wastepaper	8.3

ly in the capital goods sector, where domestic producers have lost out heavily to Japanese and German competition. Whereas consumer goods and other imports rose just 2.8% last year, capital goods imports rose 15.6% following a 19.1% jump the previous year. The strength of capital goods imports has continued into the first months of 1988. In large measure it reflects the upswing in U.S. business investment generally, including growing investment by foreigners building production facilities in the United States.

Since the U.S. adjustment problem often is characterized as one of domestic overconsumption, some commentators are portraying the shift in U.S. import composition toward capital goods as a positive development. After all, do not such imports add to the nation's capital stock, whose future output will help service the associated foreign borrowing? It is true that U.S. business investment is booming, presumably adding to the productive capital stock. Unfortunately, some of the capital goods inflow is substituting for domestically produced capital goods. Imports are preferred in many cases for their technological advantages over domestic substitutes, if any. In other cases, price is the determining factor; foreign capital goods producers, by the measure of U.S. import prices relative to export prices, have held on to about half the price advantage that they built up while the dollar was strengthening. This suggests that the competitiveness of U.S. capital goods producers is not what it was. Further dollar depreciation would be a natural part of the remedy.

Domestic producer competitiveness also is in question given the U.S. appetite for imported consumer goods, especially in light of the substantial pickup in personal consumption reported for the first quarter of 1988. Consumer confidence has returned almost to precrash levels. This owes much to the strong employment gains that also underlie the resumption of growth in real disposable income; this rose at a 4.6% annual rate over the past two quarters, after increasing less than 1% over the previous year.

Coupled with booming business fixed investment, stepped-up consumption suggests that GNP growth may be distinctly above 3% this year. Yet another year of output growth exceeding the U.S. economy's potential -- probably no higher than 2.7% — could upset price discipline or at the least produce higher inflation than earlier in the recovery. One warning comes from producer prices. Although finished goods prices rose only 1.8% in the year ended in March, prices at the intermediate and crude levels have accelerated considerably, rising 5% and 4.2% respectively (see Table 8). Finished goods prices will accelerate somewhat as the higher input costs are absorbed.

Besides, in a number of industries facing strong demand, capacity is under strain and inflation pressures are real. Overall capacity utilization now stands at 82.3%, up from 79.7% a year ago, and above the 20-year average of 81.5% (see Table 9). Operating at 86.3%, primary-processing industries are closer to full capacity than are advanced-processing industries, which are at 80.6%. Utilization is above preferred levels in the chemicals industry, and is at or

Table 9

Capacity utilization

percent

	March 1988	20-yr. average	Preferred
Total	82.3	81.5	—
Manufacturing	82.5	80.6	89.4
Primary processing	86.3	81.7	—
Advanced processing	80.6	80.1	—
Durable goods	80.2	78.7	89.2
Iron and steel	84.9*	78.6	89.3
Motor vehicles and parts	79.2	78.1	90.0
Aerospace	87.7	77.7	90.0
Nonelectrical machinery	78.7	78.1	84.7
Electrical machinery	77.1	78.1	91.3
Nondurable goods	85.9	83.5	89.6
Textiles	91.0*	85.0	98.7
Paper	94.8*	88.5	96.1
Chemicals	86.2*	78.9	84.3
Petroleum	87.9	68.8	95.7
Rubber and plastic	88.0*	84.8	95.2

*Data are for February.

Sources: Federal Reserve Board; DRI/McGraw Hill May 1987 survey for preferred rates.

near all-time highs in textiles, paper, and aerospace. Capital spending plans generally are highest in industries closest to full capacity and where the fastest increases in intermediate producer prices have occurred, such as paper, chemicals, steel, and aerospace (see Table 10). Even so, temporary bottlenecks may arise, since it takes time for new plant and equipment to be built and put into use.

The central U.S. inflation risk involves a potential loss of wage discipline. A degree of tightness is emerging in labor markets now that the unemployment rate is down to 5.5% — a level normally associated with wage pressures. Wages have responded little so far. Wage increases averaged around 3% in 1987, the same as in 1986. Even union contracts, which on average look forward about three years, have not yet shown a tendency to set higher wages than those negotiated the last time the same parties met. Moderation is encouraged by the heightened consciousness of international competition on the part of both employers and labor — an important factor prompting labor negotiators to aim for job security instead of wage gains. This altered environment suggests that the rate of wage inflation associated with 5½%-6% unemployment may be less than in previous expansions. Besides, wages typically follow, rather than lead, price trends, so that only modest wage acceleration now seems likely this year.

Altogether, U.S. consumer price inflation is trending higher in 1988, to an annual rate of perhaps 5% toward year-end. More worrisome is the possibility that the wage-price spiral will intensify in 1989 and beyond, in the event that total demand on the economy — whether from domestic or external sources — proves so strong that the labor market tightens further and capacity shortages become more prevalent. If the sources of excess demand are domestic, then the economy not only will be at risk of overheating, but also of backsliding on trade adjustment.

The cost of fiscal foot-dragging

A start has been made on reorienting the U.S. economy toward growth with trade adjustment. Taking 1987 and 1988 together, growth in fixed investment may total 13%, but in goods consumption no more than 2%. The likely 9% rise in domestic manufacturing output over the two years will exceed the rise in domestic use, the excess being diverted to help correct the external imbalance. Unfortunately, the excess diverted during 1987 and 1988 is making no great dent — less than 1% of GNP — on the external imbalance in real terms, and no dent at all in current dollar terms. Moreover, there is no assurance that greater adjustment progress is in the pipeline for 1989 and beyond.

In principle, monetary policy is less satisfactory than fiscal policy in addressing external imbalance. Tight money succeeds in reducing a trade deficit because it depresses domestic demand. Unfortunately, investment suffers disproportionately. Moreover, monetary restraint tends to drive up the exchange rate, exacerbating the extent to which domestic demand must fall to achieve any given improvement in the trade deficit. Tight fiscal

Table 10

Plant and equipment expenditures

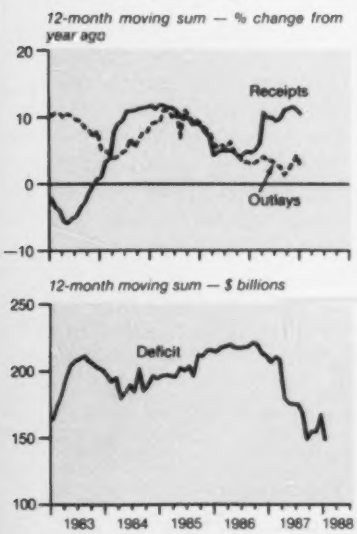
percent changes from preceding year

	Actual		Planned
	1986	1987	1988
Total	—2.0	2.4	8.8
Manufacturing	—7.0	1.9	9.8
Durable goods	—5.6	2.6	6.8
Blast furnaces, steelworks	—19.4	39.2	17.8
Motor vehicles	—4.6	—13.8	—4.8
Aircraft	10.0	—6.6	1.5
Nonelectrical machinery	—14.9	1.2	5.2
Electrical machinery	—8.4	7.7	11.8
Nondurable goods	—8.3	1.3	12.6
Textiles	—5.9	17.0	4.5
Paper	2.0	1.8	6.5
Chemicals	2.3	—2.6	8.4
Petroleum	—32.9	—5.5	11.1
Rubber	0.8	—9.5	4.3

Source: U.S. Department of Commerce.

Chart 4

U.S. federal budget



policy, by contrast, places more of the adjustment burden on consumption to reduce a trade deficit. Besides, complemented if necessary by monetary easing, it avoids counterproductive exchange rate appreciation.

The sensible way to deal with both the external imbalance and the incipient strain on U.S. resources lies, therefore, through fiscal restraint on the part of the federal government. Although considerable restraint was achieved in FY1987 and again now in FY1988 (see Chart 4), no follow-through is yet assured for FY1989. Foot-dragging on budget deficit reduction will remain a temptation even beyond FY1989. A new President and Congress may not feel constrained by the existing Gramm-Rudman-Hollings (GRH) mandate that the deficit be eliminated on the unified definition by FY1993.

Compliance could be hindered by the recent "discovery" of surpluses in the Social Security trust funds. By the Congressional Budget Office (CBO) estimate, the surpluses will rise from $20 billion last fiscal year (0.5% of GNP) to $100 billion (1.5% of GNP) by FY1993. Some see these surpluses as affording the opportunity for higher spending, warning that the surpluses would constitute fiscal drag on the economy's growth. No such conclusions are warranted. The GRH targets were developed with full awareness of the Social Security trend. Were Social Security surpluses dissipated during the next five years, meeting the GRH targets for the overall federal deficit would double the cuts otherwise required in "on-line" budget items. After all, under current tax law and without cuts, the overall federal deficit — *including* Social Security — is set to decline by the CBO projection only from 3.4% of GNP in FY1987 to 2.1% in FY1993.

Under present law and middle-of-the-road demographic assumptions, the Social Security surpluses could continue to grow well into the twenty-first century, potentially cumulating to many trillions of dollars. The overall federal position could move into surplus by the mid-1990s if the GRH targets are met, or a few years later if not. The attendant fiscal drag would be modest — not so large in any one year as to necessitate offset through higher spending at the time, let alone justify higher spending now. Instead, the challenge will be to ensure that mounting Social Security surpluses find their counterpart in stepped-up and productive real investment. That may require major reform of the Social Security system in due course, for the extra investment will be much needed in the twenty-first century to support today's baby-boom generation in retirement.

The danger in letting Social Security, or some other pretext, get in the way of reducing today's federal deficit is apparent from the implications of a "current policy" scenario. This assumes that the November 1987 Congressional accord on expenditure cuts for FY1988-89 is kept fully in effect; that the GRH mandates for federal deficit reduction in FY1990 and beyond are ignored; and that monetary policy is managed in such a way that U.S. economic growth continues at, or a mite above, the potential rate so that unemployment falls further. Because the U.S. economy looks to be growing faster in 1988 than official projections have assumed, the simulation re-

sults suggest that the federal deficit will hew fairly close to the GRH targets this fiscal year and next. But subsequent progress would be slim. Consistent with the CBO projection, the "current policy" scenario would leave the federal deficit close to $100 billion even in FY1993, with the entire reduction from the current level attributable to the Social Security accounts.

Over the same horizon, the current account deficit would narrow slightly this year but resume widening by late 1989. By 1993 it could approach $190 billion annually — 2.7% of GNP — largely through the burden of fast-rising net interest payments to foreigners; U.S. net external debt would reach in excess of $1.3 trillion dollars. Some analysts argue that this debt would be merely the natural and efficient counterpart to the large external asset accumulation desired by high-saving, but aging, Japanese and Europeans. Yet trouble already is brewing as foreigners take advantage of a depreciated dollar to buy up U.S. businesses and real estate. U.S. labor unions are ruffled. Politicians decry what they depict as a loss of U.S. independence and self-esteem, even as a threat to national security. Besides, financial markets are unlikely to sit still as the U.S. foreign debt mountain towers ever higher. Accordingly, the "current policy" scenario must be judged unworkable, unacceptable, and a formula for protectionism, controls on international capital movement, financial instability, and possibly recession.

The reward from fiscal action

To forestall the potentially calamitous consequences of an excessive buildup in U.S. external debt, and to make room for the higher investment needed to realize the economy's long-run potential, the next President and Congress would be well advised to enact speedily a fiscal package that substantially and credibly adheres to the Gramm-Rudman-Hollings targets for the federal deficit.

Ideally, the specifics of the overall fiscal package would encourage a greater allocation of resources toward capital formation and away from consumption; as things stand, the federal budget curtails private capital formation by channeling private saving toward the public sector, whose expenditures are heavily weighted toward transfers to individuals, thereby subsidizing consumption. Accordingly, a growth-oriented fiscal package would emphasize consumption taxes — on gasoline, for example — plus further cuts in consumption-subsidizing expenditures.

To be politically viable, however, a fiscal package will have to be carefully tailored to meet diverse economic and social concerns. The precise makeup cannot be readily forecast. It is likely to demand sacrifices from all segments of U.S. society.* The detailed specifics, however, are less important to the macroeconomic outcome than the aggregate dollar amount and the broad composition of the package. For illustration, a package meeting the macroeconomic need might be designed to strike a 60/40 balance between expen-

*The pros and cons of specific U.S. budgetary actions will be thrashed out by the newly established National Economic Commission. The Commission is chaired by former Special Trade Representative Robert Strauss and former Secretary of Transportation Drew Lewis. It is scheduled to report by March 31, 1989.

Table 11

A fiscal action package

measures to attain the Gramm-Rudman-Hollings goal to eliminate the federal budget deficit by FY1993
billions of dollars

		*Changes in 1993 level relative to "current policy" projection**		
			Implemented together	
	Level 1987	*Implemented individually with monetary offset*	*With no monetary offset*	*With monetary offset and further dollar depreciation*
Spending reductions				
Defense, one-year freeze in FY1989	290	16	16	16
Nondefense, one-year freeze in FY1989	84	11	11	11
Entitlements, 2 percentage point reduction in growth	402	40	40	40
Tax increases				
Personal income tax, 5% surcharge	395	26	2	21
Corporate income tax, 10% surcharge	104	8	—31	—11
Indirect business taxes	54	19	15	18
Subtotal		120	53	95
*Effect on other budget items***			—17	10
Deficit reduction			36	105

*These estimates and also those in Table 12 were developed in part using the Washington University Macro Model maintained by Lawrence H. Meyer and Associates.
**Unemployment benefits, interest paid, Social Security taxes, etc.

diture cuts and revenue increases. Principal features of this package could be as follows:

- *A one-year freeze on defense spending* is assumed to start at the beginning of FY1990. Goods and services purchases, Department of Defense military and civilian employment and pay would be frozen in current-dollar terms at the 1989 fourth-quarter level for one year. After that, defense spending would return to a path of 4% to 5% growth per year.
- *A parallel freeze would be put on nondefense spending.* Nominal purchases of goods and services, employment and pay, and grants in aid to state and local governments would be held constant over the same 12-month period. After that, nondefense spending would return to a path of 4½% to 5½% growth per year. The reductions in grants in aid are assumed not to be offset by increased state and local spending.
- *Growth in entitlement spending would slow.* From the beginning of FY1990, the growth rate of nominal spending on transfers to persons (excluding unemployment compensation) is assumed to be reduced from 6% in 1988 to 4% per year thereafter through the end of 1993.
- *Income taxes would be surcharged.* From the beginning of 1990, a 5% surcharge would be levied on personal income taxes, raising the top marginal rate, for example, from 28% to 29.4% (not 33%). A 10% surcharge would be levied on corporate income taxes. Otherwise, the income tax structure is assumed unaltered.
- *Indirect taxes would be increased.* Federal excise taxes would be raised by amounts reaching $19 billion by 1993. Accepting the CBO estimate that a one-cent per gallon tax on motor fuel would yield approximately $1 billion, a ten-cent tax would generate a $10 billion increase in indirect business taxes. The CBO also estimates that certain increases in the taxes on cigarettes and alcoholic beverages (so-called sin taxes) would yield from $7.5 billion in 1989 to $9.3 billion in 1993.

Table 11 summarizes how the several elements of this fiscal package would contribute — separately and together — to federal deficit reduction in

Table 12

The economy in 1993

	"Current policy"	With fiscal package
*Real GNP**	2.8	2.6
*GNP deflator**	4.4	4.3
Unemployment (%)	5.0	6.1
Federal Funds rate (%)	8.0	7.6
Corporate bond yield (AAA, %)	10.2	10.0
*Federal deficit***	—92	7
% of GNP	—1.3	0.0
*Dollar effective exchange rate****		
Nominal (narrow)	—11	—23
Real (broad)	—6	—11
Billions of dollars		
Trade balance (CIF)	—128	—13
Current account excluding interest	—75	30
Current account	—188	—50
Net external assets	—1330	—957

*1988-93 annual average percent change.
**FY1993, billions of dollars.
***Cumulative percent change from 1988Q1.

FY1993.* On the face of it, totaling the individual contributions, the full package would reduce the federal deficit by about $120 billion, or by enough to meet the GRH target for complete elimination of the deficit by 1993. But the full package would impose significant fiscal drag on the economy. Unless this drag were offset by monetary relaxation, nominal GNP growth during the next five years might be cut from a 7.4% annual average to growth of 6.2%. That would wipe out most of the expected gains in tax revenues and inflate spending for unemployment relief. Altogether, the package would yield only about $40 billion net reduction in the federal deficit and entail crippling economic cost.

The constructive solution lies through a well judged easing of monetary policy that offsets part of the fiscal drag implied by the package. Once the fiscal measures begin to take effect, the Federal Funds rate could be lowered modestly relative to its path in the "no policy change" scenario. Lower interest rates would induce additional dollar depreciation (projected by 1993 at 23% from the current level on the nominal "narrow" Morgan index, but amounting only to about 10% in broad real effective terms). Under this mix of fiscal restraint, monetary ease, and dollar depreciation, the U.S. economy should be capable of real GNP growth averaging 2.6% — consistent with no more than a small increase in unemployment and no acceleration in inflation relative to the outlook under the "current policy" scenario (see Table 12).

The outcomes for the twin deficits would be vastly improved by the suggested policy package. By FY1993 the federal budget would move into small surplus. The merchandise trade deficit in 1993 would be down to an insubstantial $13 billion on the CIF valuation. The current account, excluding interest, would be in surplus of up to $30 billion. Interest payments on a net foreign debt approaching $1 trillion would leave the current account in the red by $50 billion. At that level, however, the deficit would be down to only 0.7% of GNP — about one-fifth the 1987 imbalance. Moreover, this policy package would prevent outsize growth in net foreign debt, instead holding it below 15% of GNP.

Time for action

The main lesson from this analysis is that the twin U.S. deficits can be corrected within four or five years by a fairly modest shift in the macroeconomic policy mix without triggering either recession or severe inflationary pressures. Meeting these goals, however, will demand a major commitment on the part of the next President and Congress, together with the Federal Reserve. The commitment would be to attaining the Gramm-Rudman-Hollings budget targets, with the Federal Reserve providing a degree of monetary ease to help offset fiscal drag. Enacting

*Because the spending reductions are specified in current dollar terms, their contributions to deficit reduction are substantially independent of developments in the economy at large. But the net proceeds of tax increases depend critically on the rate of inflation and economic growth. These in turn are affected by the fiscal posture. The contractionary effect of any one of the suggested tax measures, if implemented in isolation, would not be very large. As a result, each would deliver deficit reduction fairly close to what casual arithmetic — ignoring the contractionary effect — might suggest.

an appropriate fiscal package is a tough political challenge not only because of the distributional aspects but also because austerity is likely to be perceived as all pain for no gain; hence the importance of the monetary dimension.

It would be tempting to shirk fiscal action in favor of simply waiting for the markets to drive down the dollar. Yet passivity is no solution to either of the twin deficits. Since the economy is virtually at full employment and capacity use, dollar depreciation alone is an ineffective instrument for trade balance correction. Unaccompanied by fiscal action, the major result of dollar depreciation would be inflation. Nor, given the high degree of indexation of federal revenues and spending, would that inflation do much to trim the budget deficit.

Accordingly, there is no workable substitute for fiscal action to correct the twin deficits. The honeymoon of a new Administration and Congress, together with the strong state of the economy, provides an exceptional opportunity to launch a budgetary initiative adequate to the challenge, the more so as there is plenty of evidence that the voting public is troubled by the chronic deficits and debt buildup.

This shift of U.S. policy makes no extraordinary demands on "cooperation" by Japan and Europe. But the needed improvement in U.S. real net exports will exert a drag on their economic growth comparable to that of the 1979 oil shock. Albeit with some delay, Japan and Europe will find it in their self-interest to compensate for loss of external demand by measures that bolster domestic demand. If the compensation is roughly one-for-one, the monetary easing accompanying U.S. fiscal action would involve the dollar falling further by 10% or so in real terms to achieve major correction of the U.S. trade deficit. Less demand compensation on the part of Japan and Europe would require a steeper decline in the dollar. Thus there is no single right rate for the dollar that would assure international adjustment independent of demand management policies in the United States and the other G-7 nations.

Two or three years ago, the possibility of major U.S. trade adjustment was seen as a real threat to Japan's prosperity. As things have turned out, expansive monetary policy and last year's fiscal stimulus have enabled Japan to resume fast economic growth based on domestic demand. Because Japan's economy has coped well with its loss of net external demand so far, there is confidence that it will cope with the further loss to come. This should be an encouragement to Hong Kong, Korea, and Taiwan as they too come to grips with the reduction in their net exports that regional adjustment will require. Since the entire region will have to become less dependent on the U.S. market as the engine of economic growth, U.S. adjustment will act as a force for stepped-up integration of the Asian economies.

U.S. adjustment is more disconcerting for Europe, no matter that European opinion leaders long have preached its urgency. Except for Britain, few European countries — and especially not Germany — have shucked off the notion that economic growth is most prudently based on exports. Expansionary demand policies remain out of style in Europe — witness the German government's swift rejection of its

national research institutes' end-April recommendation for a less restrictive fiscal policy. Instead, many European policymakers are preoccupied by the approach of "1992." By that year EC members are supposed to have dismantled the presently manifold intracommunity nontariff barriers, thereby "completing the internal market." In principle, that should be good for Europe's productivity, dynamism, and ability to live with external shocks. U.S. adjustment provides added incentive for Europe to carry through the structural reforms that are the *sine qua non* of success in its "1992" endeavor, in turn allowing Europe to base its growth with confidence on domestic demand.

In sum, steadfast implementation of a credible U.S. fiscal action program during the next presidential term promises rich dividends for both the U.S. and the world economy.

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Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

Effective exchange rates — industrial countries

Index numbers, 1980-82 average=100.

	United States	Canada	Japan	Australia	France	Germany	Italy	United Kingdom	Austria	Belgium	Netherlands	Spain	Switzerland	Denmark	Norway	Sweden
Nominal against 15 other industrial-country currencies																
1983	114.2	100.8	107.8	92.0	87.3	107.5	90.3	91.6	103.6	90.0	105.0	78.4	111.5	96.4	99.5	82.2
1984	122.3	97.3	112.9	94.2	84.4	107.3	86.7	88.1	103.6	88.9	103.9	77.4	110.5	93.9	97.8	84.3
1985	127.0	92.8	115.9	76.3	85.5	107.8	82.1	88.2	104.2	89.6	104.0	75.6	109.5	95.1	95.6	83.9
1986	108.0	87.6	150.1	61.4	87.4	116.1	82.9	80.7	107.8	92.9	110.3	73.4	118.1	99.7	89.2	81.6
1987	94.1	89.6	164.4	58.3	87.1	122.0	82.3	79.0	110.8	95.6	114.6	73.1	123.1	102.8	85.7	80.1
1987																
May	93.5	86.4	168.2	58.7	87.1	121.7	82.1	79.8	110.1	95.6	114.3	71.4	123.8	103.6	85.8	80.4
June	94.8	88.8	164.7	59.9	87.1	121.6	81.8	79.1	110.2	95.6	114.3	71.9	122.7	103.4	86.5	80.5
July	96.0	90.0	159.1	60.0	87.2	121.4	81.6	79.2	110.2	95.4	114.2	72.5	122.2	102.4	87.2	80.4
August	95.7	90.0	162.7	59.8	86.8	121.3	81.5	78.9	110.1	95.2	114.1	73.6	122.6	101.3	87.3	80.2
September	93.9	90.3	165.4	60.5	86.9	121.5	81.8	79.6	110.1	95.3	114.4	74.6	122.7	101.0	87.4	79.7
October	93.4	90.7	165.1	58.9	86.7	121.3	81.7	80.0	115.7	95.1	114.5	75.9	122.3	101.3	87.0	79.6
November	90.0	89.3	171.2	54.3	86.7	123.6	81.2	81.5	110.9	95.6	115.9	75.6	125.4	102.5	85.2	79.2
December	87.4	89.4	178.6	55.1	87.0	123.8	81.4	81.9	110.8	95.8	115.9	75.2	126.9	103.0	83.5	78.9
1988																
January	87.4	91.0	179.8	55.1	87.2	123.4	81.3	81.2	110.7	95.6	115.8	74.8	126.5	103.0	84.6	79.1
February	88.2	92.6	179.3	56.0	86.8	122.9	81.0	80.8	110.7	95.4	115.6	75.0	125.1	102.8	85.4	79.7
March	86.8	93.7	180.7	57.0	86.3	122.8	80.5	83.5	110.7	95.2	115.4	75.5	123.9	102.3	85.1	79.9
April	85.7	95.0	183.3	58.3	85.2	122.7	80.1	85.2	110.6	95.2	115.3	76.6	123.3	101.2	86.8	80.3
March 18	86.9	93.4	179.9	57.3	86.2	122.9	80.4	83.9	110.7	95.2	115.3	75.4	123.9	102.2	84.9	79.8
25	86.7	94.0	181.9	57.5	86.1	122.7	80.4	83.8	110.6	95.1	115.2	75.6	123.6	102.0	85.2	80.0
April 1	85.5	94.5	183.7	56.6	86.3	122.8	80.3	84.7	110.6	95.0	115.3	75.7	124.1	101.9	85.2	79.8
8	85.9	94.1	182.8	56.9	86.2	122.6	80.2	85.1	110.6	94.9	115.2	76.0	123.8	101.9	85.5	79.9
15	86.1	94.5	182.8	57.6	86.2	122.6	80.2	84.7	110.6	94.4	115.3	76.0	123.5	101.7	85.9	80.0
22	85.4	94.7	183.7	57.6	86.1	122.5	80.0	85.6	110.6	94.9	115.2	76.2	123.6	101.3	86.5	80.1
29	85.7	95.0	183.3	58.3	85.2	122.7	80.1	85.2	110.6	95.2	115.3	76.6	123.3	101.2	86.8	80.3
Real against 15 other industrial-country currencies																
1982	109.3	100.6	92.4	105.7	97.3	99.9	98.5	98.8	101.2	91.9	100.5	98.9	103.0	97.9	103.2	95.6
1983	112.7	102.6	96.8	101.8	94.7	101.0	101.1	93.1	102.0	88.6	100.8	88.9	105.1	100.4	102.0	90.8
1984	119.6	100.2	97.8	106.4	97.0	98.0	101.8	90.2	103.0	85.9	97.8	91.1	100.1	99.2	100.5	96.0
1985	121.7	96.4	99.0	88.9	100.4	96.6	100.2	92.8	103.2	85.2	96.5	92.4	97.9	101.2	99.3	96.8
1986	100.9	93.3	122.2	78.4	103.8	103.3	102.6	87.3	106.5	84.6	101.4	93.9	105.5	107.4	96.9	96.0
1987	90.2	96.4	128.0	80.3	105.2	106.3	103.5	87.4	110.3	84.3	104.4	95.8	109.4	111.6	100.3	95.3
1987																
November	86.6	96.8	131.8	76.5	104.3	107.3	103.4	90.6	110.0	83.3	105.2	99.5	111.0	112.1	100.8	95.1
December	84.3	97.0	136.9	77.9	104.6	107.6	104.0	91.1	110.1	83.2	104.6	98.9	112.3	112.5	99.0	94.8
1988																
January	84.5	99.0	137.3	78.1	104.7	107.2	104.5	90.7	109.8	83.1	102.4	98.8	111.5	112.3	110.7	95.7
February	85.5	100.1	136.3	79.7	104.2	106.8	103.9	90.3	109.9	82.5	102.6	99.6	110.3	112.8	102.1	96.7
March	84.7	100.5	136.0	81.5	103.9	106.2	103.5	93.5	109.9	82.2	103.3	100.5	109.4	112.7	103.0	96.1
April	83.4	102.7	137.1	83.8	102.8	106.1	102.9	95.6	109.6	81.7	103.4	101.6	109.0	111.8	105.2	96.5
Real against 18 other industrial-country and 22 LDC currencies																
1982	109.7	101.8	94.0	105.2	96.9	99.4	98.1	98.5	101.1	91.5	99.5	98.9	102.6	97.7	102.9	95.4
1983	114.9	104.6	100.4	102.0	94.4	100.6	100.8	93.1	102.1	88.2	99.5	89.2	105.1	100.3	101.9	91.0
1984	120.8	102.7	102.4	106.7	96.4	96.8	101.0	89.7	102.6	85.0	95.9	91.3	99.8	99.0	100.5	95.8
1985	123.3	99.0	104.2	89.6	99.9	95.7	99.7	92.2	102.8	84.4	94.7	93.1	97.6	101.1	99.7	96.7
1986	106.6	94.4	127.1	80.4	104.4	104.4	103.9	88.1	107.3	85.1	101.3	96.5	107.4	107.9	97.8	96.7
1987	96.5	96.6	132.0	82.0	106.4	108.6	106.1	89.0	111.8	85.5	105.4	99.3	112.4	112.6	101.4	96.6
1987																
November	92.4	96.4	135.0	78.1	105.5	109.8	106.1	92.3	111.6	84.7	106.3	103.2	114.1	113.0	101.8	96.3
December	90.6	96.4	140.1	79.6	105.9	110.1	106.9	93.0	111.8	84.6	105.8	102.8	115.5	113.4	100.1	96.1
1988																
January	90.7	98.5	141.0	79.9	106.0	110.1	107.4	92.9	111.9	84.4	103.7	102.8	114.8	114.3	103.1	99.2
February	91.2	99.6	139.9	81.3	105.3	109.3	106.5	92.3	111.7	83.7	103.7	103.2	113.3	114.8	104.4	100.1
March	90.1	99.8	139.2	83.1	104.9	108.4	105.9	95.4	111.5	83.3	104.2	103.9	112.2	114.3	104.9	98.7
April	88.9	102.0	140.5	85.6	103.9	108.5	105.4	97.7	111.3	82.9	104.4	105.0	111.7	113.7	107.4	99.7

Real effective exchange rates — developing countries

Index numbers, 1980-82 average=100.

	Argentina	Brazil	Chile	Colombia	Mexico	Peru	Venezuela	Hong Kong	Indonesia	Korea	Malaysia	Philippines	Singapore	Taiwan	Israel	Turkey
1982	77.0	113.0	97.3	105.9	82.7	105.1	110.2	101.4	111.7	101.9	105.6	106.7	100.8	96.6	108.7	96.1
1983	71.6	86.0	89.3	104.9	79.0	98.5	117.3	94.9	96.2	97.6	113.9	98.1	101.8	94.6	120.8	94.2
1984	80.2	85.7	90.1	99.6	91.9	105.8	85.9	99.5	96.0	96.5	119.6	107.9	102.5	97.1	119.5	89.6
1985	71.0	84.8	79.5	85.3	90.4	96.5	92.7	103.3	93.7	88.7	115.7	114.1	95.2	94.3	106.5	88.8
1986	60.9	74.2	68.5	67.5	65.0	96.4	85.5	93.4	70.8	75.4	94.1	89.9	79.9	88.4	100.8	70.7
1987	53.4	73.6	65.2	63.1	66.7	107.8	60.2	89.3	54.2	74.8	88.4	86.6	73.6	93.5	97.2	62.7
1987																
May	53.0	75.6	65.9	62.6	63.0	108.2	59.7	89.7	53.3	73.7	89.8	83.8	73.0	92.0	94.9	63.1
June	53.6	75.4	65.6	62.8	65.0	109.3	61.7	90.6	54.2	75.7	89.7	86.1	73.5	94.8	96.8	62.9
July	53.4	73.0	65.7	64.0	66.3	115.2	63.7	90.0	55.5	77.4	89.5	88.6	74.0	96.0	98.7	63.1
August	54.7	71.2	66.2	63.6	69.6	120.0	64.4	89.6	55.3	77.0	89.3	88.3	74.4	97.5	99.7	63.2
September	53.6	71.1	65.4	62.8	71.5	121.2	64.6	90.3	54.3	75.9	88.5	87.2	73.7	97.5	99.8	61.8
October	54.0	73.4	64.4	62.2	73.7	120.1	64.9	90.1	54.6	75.9	87.2	89.3	73.2	98.2	100.6	60.9
November	49.3	74.0	61.8	60.5	73.6	105.0	64.2	89.2	53.1	74.6	85.0	87.5	72.2	95.1	99.4	58.8
December	49.1	74.8	61.5	60.0	67.3	80.3	63.7	86.6	51.4	73.6	83.4	87.9	72.5	96.1	99.2	62.5
1988																
January	49.6	77.2	58.2	61.7	72.8	76.7	67.1	84.9	51.3	75.3	82.1	87.1	71.2	95.8	100.9	63.0
February	51.3	78.4	59.1	62.6	79.3	86.2	72.9	85.9	52.1	77.7	81.8	86.5	70.9	96.2	102.0	63.7
March	51.9	76.8	60.1	59.4	81.5	104.4	76.9	86.2	51.4	78.3	81.2	85.5	70.3	95.2	102.7	64.5
April	46.3	72.1	62.4	59.9	89.1	96.5	78.8	86.4	50.7	79.9	81.4	82.0	70.2	94.4	104.4	60.3

International banking market size

at end of period, billions of dollars

	1982	1983	1984	1985	1986		1987		
					Sep	Dec	Mar	Jun	Sep
Gross claims									
Eurocurrencies, on residents and nonresidents	**2 146**	**2 253**	**2 359**	**2 833**	**3 347**	**3 560**	**3 811**	**3 942**	**4 147**
On nonbanks	634	665	694	822	914	938	995	1 175	1 215
On banks	1 512	1 588	1 665	2 011	2 433	2 622	2 817	2 767	2 932
In dollars	1 694	1 797	1 894	2 101	2 381	2 534	2 602	2 753	2 882
In other currencies	452	456	465	732	966	1 025	1 209	1 189	1 265
Domestic currencies, on nonresidents	**398**	**402**	**402**	**506**	**633**	**672**	**721**	**757**	**801**
On nonbanks	132	140	142	187	211	209	229	236	230
On banks	266	262	260	319	422	463	492	521	571
In dollars	211	221	215	215	219	227	206	215	220
In other currencies	187	181	187	291	414	445	515	542	581
Total	**2 544**	**2 655**	**2 761**	**3 339**	**3 980**	**4 232**	**4 532**	**4 699**	**4 948**
On nonbanks	766	805	836	1 009	1 125	1 147	1 224	1 411	1 445
On banks	1 778	1 850	1 925	2 330	2 855	3 085	3 309	3 288	3 503
In dollars	1 905	2 018	2 109	2 316	2 600	2 761	2 808	2 968	3 102
In other currencies	639	637	652	1 023	1 380	1 470	1 724	1 731	1 846
Gross liabilities									
Eurocurrencies, to residents and nonresidents	**2 165**	**2 278**	**2 386**	**2 846**	**3 384**	**3 579**	**3 851**	**3 999**	**4 205**
To nonbanks	432	479	497	585	660	685	740	768	791
To official monetary institutions	91	88	96	112	110	109	125	139	151
To other banks	1 645	1 711	1 793	2 149	2 614	2 786	2 986	3 085	3 263
In dollars	1 741	1 846	1 950	2 147	2 425	2 553	2 648	2 785	2 936
In other currencies	427	432	436	699	959	1 026	1 203	1 214	1 269
Domestic currencies, to nonresidents	**250**	**260**	**280**	**377**	**464**	**494**	**558**	**590**	**638**
To nonbanks	70	73	80	114	121	116	134	144	134
To banks	180	187	200	263	343	377	422	436	504
In dollars	116	135	146	169	191	192	192	197	212
In other currencies	134	125	134	208	273	302	364	383	427
Total	**2 418**	**2 538**	**2 666**	**3 223**	**3 848**	**4 073**	**4 407**	**4 579**	**4 843**
To nonbanks	502	552	577	699	781	801	874	912	925
To banks and official institutions	1 916	1 986	2 089	2 524	3 067	3 272	3 533	3 660	3 918
In dollars	1 857	1 981	2 096	2 316	2 616	2 745	2 840	2 982	3 148
In other currencies	561	557	570	907	1 232	1 328	1 567	1 597	1 696
Net market size	**1 285**	**1 382**	**1 430**	**1 676**	**1 912**	**1 979**	**2 083**	**2 170**	**2 239**

International bond issues and bank credits

millions of dollars

	1985	1986	1987	1988			Jan-Mar	
				Jan	Feb	Mar	1988	1987
By country of borrower								
Industrial countries	**226 711**	**273 653**	**248 758**	**19 094**	**40 209**	**24 002**	**87 515**	**83 305**
Australia	14 407	19 251	11 349	427	828	639	3 040	1 894
Austria	2 435	3 821	4 695	1 494	836	569	1 584	2 899
Belgium	3 269	5 042	4 443	224	717	419	1 043	1 360
Canada	17 184	23 752	10 161	1 078	1 350	879	2 802	3 306
Denmark	3 589	9 813	4 774	294	628	359	2 878	1 281
Finland	1 846	3 578	3 517	90	642	779	1 191	1 511
France	18 773	20 027	16 022	3 430	2 434	2 856	5 476	8 720
Germany	3 452	12 589	10 922	286	1 438	1 338	4 820	3 061
Greece	1 567	1 361	1 462	—	—	350	110	350
Ireland	1 881	3 281	2 195	231	—	331	113	562
Italy	11 033	12 723	13 421	537	635	1 499	2 023	2 672
Japan	21 269	35 283	45 591	3 518	4 312	2 116	9 840	9 947
Netherlands	2 299	3 215	5 069	88	1 019	570	1 483	1 676
New Zealand	2 707	7 818	5 942	—	311	437	2 204	748
Norway	3 905	6 750	5 917	1 189	691	478	2 909	2 357
Portugal	2 382	2 503	2 159	161	528	—	428	689
South Africa	825	—	—	—	—	—	—	—
Spain	3 913	7 083	1 794	44	466	434	421	944
Sweden	9 890	8 000	5 766	1 120	851	1 683	2 283	3 654
United Kingdom	25 424	24 109	33 225	1 983	8 407	4 974	7 702	15 384
United States	69 193	55 703	45 412	2 847	8 692	2 748	13 698	14 286
*Other**	5 447	7 950	14 920	53	5 422	546	1 465	6 022
Developing countries	**32 139**	**23 684**	**28 070**	**1 649**	**1 341**	**2 152**	**4 236**	**5 142**
Latin American countries	**8 115**	**3 395**	**10 729**	**1 029**	**100**	**79**	**177**	**1 208**
Argentina	3 700	17	2 110	—	—	—	—	—
Brazil	—	350	—	—	—	—	—	—
Chile	1 085	—	—	—	—	—	—	—
Colombia	1 052	240	137	1 000	—	—	—	1 000
Mexico	109	313	7 700	—	—	—	—	—
Venezuela	48	—	30	—	100	—	—	100
*Other***	2 121	2 475	753	29	—	79	177	108
Asian countries	**18 410**	**14 444**	**13 219**	**288**	**1 186**	**1 560**	**3 057**	**3 015**
India	818	1 795	2 158	—	385	346	694	731
Indonesia	451	1 343	1 745	—	126	50	251	176
Korea	5 898	3 251	2 522	159	—	345	775	504
Malaysia	2 219	1 204	554	—	232	276	84	508
Philippines	925	—	—	—	—	—	—	—
Thailand	1 497	1 676	463	—	300	—	100	300
Other	6 602	5 174	5 778	129	123	544	1 152	796
Middle Eastern and African countries	**5 613**	**6 044**	**4 122**	**331**	**75**	**512**	**1 002**	**918**
Algeria	1 450	1 344	344	180	—	153	75	333
Nigeria	—	—	—	—	—	—	—	—
Turkey	1 203	2 754	2 831	139	75	359	628	573
Other	2 960	1 945	947	12	—	—	300	12
Eastern European countries	**5 236**	**3 941**	**3 564**	**73**	—	**317**	**1 150**	**390**
Hungary	1 577	1 315	1 951	—	—	317	576	317
Soviet Union	1 489	1 821	864	73	—	—	293	73
*Other****	2 169	805	749	—	—	—	280	—
International organizations****	**20 635**	**19 896**	**20 013**	**1 010**	**2 126**	**3 034**	**6 011**	**6 170**
By type of instrument and currency								
International bond issues	**167 756**	**228 106**	**177 291**	**12 344**	**22 812**	**18 996**	**57 703**	**54 152**
Eurobonds	136 731	188 747	140 481	8 977	18 403	13 064	48 418	40 443
U.S. dollar	97 782	119 096	56 727	3 830	8 485	2 995	17 031	15 310
German mark	9 491	17 127	15 518	1 636	2 515	3 256	7 340	7 407
British pound	5 766	10 585	14 997	887	2 623	2 713	5 218	6 224
Japanese yen	6 539	18 516	23 116	1 154	1 152	694	8 168	2 999
European composite units	7 038	7 057	7 423	553	214	1 163	3 377	1 929
Other	10 114	16 366	22 699	916	3 414	2 244	7 284	6 574
Foreign bonds	31 025	39 359	36 811	3 367	4 410	5 932	9 285	13 709
U.S. dollar	4 655	6 782	5 911	450	250	979	1 550	1 679
German mark	1 741	—	—	—	—	—	—	—
British pound	958	394	—	—	—	—	—	—
Swiss franc	14 954	23 213	23 976	2 789	3 226	3 048	5 992	9 063
Japanese yen	6 379	5 223	3 068	—	232	1 286	981	1 517
Other	2 339	3 747	3 856	128	702	620	762	1 450
International bank credits	**116 764**	**93 269**	**123 115**	**9 481**	**20 884**	**10 509**	**21 209**	**40 854**
Eurocurrency credits	110 317	84 208	112 104	9 452	20 630	9 637	19 155	39 720
Foreign credits	6 647	9 061	11 012	29	234	872	2 054	1 135
Total	**284 720**	**321 375**	**300 406**	**21 825**	**43 676**	**29 505**	**78 912**	**95 006**

*Includes multinational organizations. **Includes unallocated. ***Includes COMECON institutions. ****Includes regional development organizations.

Eurocurrency deposit rates

prime banks' bid rates, at or near end of month

	1984	1985	1986	1987			1988			
	Dec	Dec	Dec	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Eurodollar										
overnight	8.63	12.25	22.00	6.75	6.62	6.75	6.69	6.69	6.75	6.88
one month	8.38	8.00	6.50	7.06	8.25	7.06	6.69	6.69	6.69	7.00
three months	8.63	7.88	6.25	7.62	7.94	7.37	6.81	6.69	6.81	7.19
six months	9.13	7.88	6.12	7.69	7.94	7.50	6.87	6.75	7.06	7.44
twelve months	9.81	7.94	6.12	8.00	8.19	7.81	7.25	7.12	7.44	7.88
Euro-Canadian dollar										
one month	9.88	9.00	8.00	7.69	8.56	8.00	8.50	8.25	8.25	8.44
three months	10.81	9.00	8.12	8.19	9.00	8.12	8.37	8.37	8.37	8.75
six months	10.06	9.00	8.19	8.50	9.12	8.44	8.50	8.37	8.26	8.88
twelve months	10.44	9.00	8.31	8.87	9.44	8.87	8.75	8.75	9.00	9.25
Euro-French franc										
one month	10.69	12.50	10.12	9.00	9.37	8.75	7.50	7.25	7.81	8.00
three months	10.69	13.00	10.37	9.00	9.37	9.00	8.00	7.75	8.31	8.25
six months	11.00	13.13	9.75	9.00	9.37	9.25	8.25	8.19	8.44	8.38
twelve months	11.38	12.25	8.75	9.00	9.37	9.25	8.50	8.50	8.56	8.50
Euromark										
one month	5.50	4.75	5.12	3.69	3.94	3.25	3.19	3.31	3.25	3.31
three months	5.50	4.75	4.87	4.12	3.94	3.37	3.25	3.31	3.31	3.44
six months	5.56	4.75	4.81	4.25	4.06	3.50	3.31	3.37	3.37	3.63
twelve months	5.56	4.81	4.81	4.44	4.12	3.75	3.56	3.50	3.56	3.81
Euro-Dutch guilder										
one month	5.69	5.75	6.31	5.12	4.81	4.50	3.94	3.94	3.87	3.88
three months	5.75	5.75	6.00	5.25	4.94	4.62	4.00	4.00	3.87	3.94
six months	5.81	5.81	5.87	5.37	5.00	4.69	4.12	4.06	4.06	4.06
twelve months	5.94	5.88	5.81	5.44	5.12	4.81	4.37	4.12	4.19	4.19
Euro-Swiss franc										
one month	4.44	3.88	3.94	2.87	4.94	2.50	1.25	1.37	1.62	2.06
three months	4.56	4.00	3.94	3.87	4.06	3.00	1.81	1.69	1.87	2.25
six months	4.63	4.00	3.87	3.87	4.06	3.19	2.37	2.12	2.19	2.44
twelve months	4.69	4.06	3.87	3.87	4.06	3.25	2.87	2.69	2.62	2.75
Eurosterling										
one month	9.50	11.69	11.12	9.37	9.00	8.56	8.44	9.00	8.44	8.06
three months	9.88	11.81	11.12	9.44	8.94	8.81	8.69	9.31	8.56	8.31
six months	10.00	11.81	11.06	9.44	9.00	9.00	8.87	9.50	8.69	8.69
twelve months	10.19	11.69	11.06	9.50	9.12	9.31	9.25	9.75	9.00	9.06
Euroyen										
one month	6.19	7.13	4.56	4.37	4.75	4.00	4.06	4.37	4.00	3.81
three months	6.19	6.56	4.50	4.50	4.44	4.12	4.12	4.19	4.00	3.94
six months	6.13	6.50	4.37	4.50	4.37	4.12	4.12	4.19	4.12	4.13
twelve months	6.13	6.38	4.31	4.62	4.44	4.12	4.19	4.19	4.19	4.25
European currency unit										
one month	9.25	9.63	8.56	7.19	6.94	6.62	5.87	6.12	6.19	6.13
three months	9.38	9.63	8.44	7.44	7.00	6.75	6.19	6.31	6.37	6.38
six months	9.50	9.63	8.06	7.44	6.94	6.87	6.37	6.44	6.44	6.50
twelve months	9.63	9.63	7.31	7.62	7.06	7.00	6.62	6.62	6.62	6.69

International bond yields

average yield of several actively traded, high quality issues with a maturity of 7 to 12 years at or near end of month

	1985	1986	1987					1988		
	Dec	Dec	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
United States companies										
Eurodollar	9.68	8.67	9.99	10.95	10.41	10.21	10.31	10.24	9.79	9.78
Euromark	6.73	6.62	6.82	6.87	7.04	6.74	6.69	6.54	6.27	6.33
Swiss franc	5.49	5.70	5.43	5.50	5.83	5.56	5.71	5.57	5.66	5.61
European governments										
Eurodollar	10.52	9.91	11.41	11.81	11.63	11.63	11.64	11.48	11.38	11.50
Euromark	7.03	6.77	6.85	6.76	6.61	6.61	6.21	6.23	6.07	6.06
Swiss franc	4.91	4.51	4.38	4.39	4.54	4.15	4.11	4.05	3.71	3.88
European currency unit	10.23	10.20	10.43	10.46	11.10	11.06	10.84	10.85	10.56	10.35

Central bank discount rates

at or near end of month

	1984	1985	1986	1987	1988				Current	
	Dec	Dec	Dec	Dec	Jan	Feb	Mar	Apr	May 4 1988	effective since
United States	8.00	7.50	5.50	6.00	6.00	6.00	6.00	6.00	6.00	Sep 24, 87
Canada	10.09	9.49	8.47	8.66	8.62	8.57	8.78	9.12	9.12	Apr 28, 88
Austria	4.50	4.00	4.00	3.00	3.00	3.00	3.00	3.00	3.00	Dec 3, 87
Belgium	11.00	9.75	8.00	7.00	6.75	6.75	6.50	6.50	6.50	Mar 3, 88
Denmark	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	Oct 27, 83
Finland	9.50	9.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	May 19, 86
France	9.50	9.50	9 50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	4.50	4.00	3 50	2.50	2.50	2.50	2.50	2.50	2.50	Dec 3, 87
Ireland	14.00	10.25	13 25	9.25	9.25	9.25	9.25	8.50	8.50	Apr 11, 88
Italy	16.50	15.00	12 00	12.00	12.00	12.00	12.00	12.00	12.00	Aug 28, 87
Netherlands	5.00	5.00	4.50	3.75	3.75	3.25	3.25	3.25	3.25	Feb 5, 88
Portugal	25.00	19.00	16 00	14.50	14.50	14.00	14.00	14.00	14.00	Feb, 88
Spain	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	Jul 26, 77
Sweden	9.50	10.50	7.50	7.50	7.50	7.50	7.50	8.50	8.50	Apr 29, 88
Switzerland	4.00	4.00	4.00	2.50	2.50	2.50	2.50	2.50	2.50	Dec 4, 87
United Kingdom	9.38	11.31	10.81	8.37	8.37	8.87	8.37	7.88	7.88	Apr 7, 88
Japan	5.00	5.00	3.00	2.50	2.50	2.50	2.50	2.50	2.50	Feb 23, 87
New Zealand	13.50	19.80	24.60	18.55	18.05	18.20	17.80	19.70	20.30	May 4, 88
South Africa	21.75	13.50	10.00	9.50	9.50	9.50	9.50	9.50	9.50	May 18, 87
Argentina*	18.19	5.00	11.19	17.59	15.71	16.71	18.38	n.a.	18.38	Mar, 88
Korea	5.00	5.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	Jul 10, 86
Philippines	12.11	11.50	9.64	9.25	n.a.	n.a.	n.a.	n.a.	n.a.	
Singapore	6.75	5.00	5 00	5.00	5.00	3.50	3.50	n.a.	3.50	Feb, 88
Thailand	10.97	11.00	8.00	8.00	8.00	n.a.	n.a.	n.a.	8.00	Sep 1, 86
Venezuela	11.00	12.94	12.79	12.49	n.a.	n.a.	n.a.	n.a.	12.98	Nov, 87

*Percent per month.

Day-to-day money rates

monthly averages

	1984	1985	1986	1987				1988			
	Dec	Dec	Dec	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
United States	8.38	8.27	6.91	7.22	7.29	6.69	6.77	6.83	6.58	6.58	6.87
Canada	10.50	9.23	8.28	8.80	8.41	8.16	8.40	8.44	8.41	8.45	8.38
Austria	7.63	7.25	7.62	4.12	4.60	4.20	4.10	4.50	3.50	3.50	n.a.
Belgium	9.12	6 60	5.09	5 24	4.34	5.44	5.09	5.02	4.16	5.45	5.14
Finland	15.07	11.96	11 97	11.00	11.00	11.00	11.00	11.00	11.00	11.00	n.a.
France	10.95	9.02	7.80	7.36	7.69	8.67	8.23	7.80	7.26	7.54	7.55
Germany	5.62	4.64	5.00	3.71	3.74	3.55	3.19	3.13	3.32	3.34	3.23
Ireland	14.50	9.62	13 00	8.75	6.50	8.50	7.50	8.00	8.50	8.25	n.a.
Italy	17.25	14.75	11.42	11.70	10.90	10.25	10.25	10.60	9.87	10.14	9.95
Netherlands	5.60	5.75	6.19	4.75	5.19	4.44	4.25	4.12	3.87	3.94	4.00
Norway	12.50	12.50	14.00	14.00	13.80	13.68	14.02	13.88	n.a.	n.a.	n.a.
Spain	12.18	9 92	11.76	17.45	16.22	14.60	14.02	13.20	12.13	11.40	n.a.
Sweden	11.88	11.83	8.89	8.57	8.42	8.97	8.43	8.75	9.37	8.95	10.15
Switzerland	1.50	2.00	1.12	1.37	1.25	1.50	0.50	0.50	1.00	1.25	2.13
United Kingdom	6.31	9.72	9.19	9.72	9.68	9.13	7.60	8.26	8.28	8.55	8.13
Australia	10.98	18.37	15.40	11.58	10.77	10.90	10.37	10.23	10.28	10.33	n.a.
Japan	6.41	8.02	4.18	3.39	3.37	3.39	3.81	3.54	3.39	3.53	3.28
South Africa	21.13	12.50	8.50	8.45	8.64	8.45	9.76	9.75	9.25	9.85	10.00
Argentina*	17.75	4.50	7.00	12.50	9.00	9.80	14.90	16.40	14.90	17.60	16.18
Brazil	272.02	352.23	83.05	150.10	150.10	329.33	n.a.	n.a.	n.a.	n.a.	n.a.
Hong Kong	6.80	6.10	3 90	3.67	4.92	1.90	0.56	0.58	1.83	2.84	3.64
Korea	10.00	8.80	9 00	9.50	10.00	8.70	8.60	n.a.	n.a.	n.a.	n.a.
Philippines	15.22	15.03	9.92	16.50	12.94	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Singapore	6.01	4.53	3.51	2.52	3.55	3.40	2.57	2.73	2.93	3.01	n.a.
Taiwan	8.07	4.50	4.00	4.21	3.67	3.57	4.56	5.11	5.52	n.a.	n.a.

*Percent per month.

Treasury bill rates

bond equivalent yields, at or near end of month

	1984	1985	1986	1987				1988			
	Dec	Dec	Dec	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
United States	8.12	7.28	5.83	6.81	5.41	5.79	5.84	5.80	5.78	5.87	6.15
Canada	9.84	9.24	8.22	9.35	7.84	8.31	8.41	8.37	8.32	8.53	8.87
Belgium	10.90	9.89	7.50	6.74	7.25	6.95	6.84	6.44	6.24	6.18	6.18
Ireland	15.10	11.15	13.60	8.93	8.80	9.10	8.69	8.34	8.76	8.33	7.83
Italy	14.69	13.10	10.00	11.78	11.98	12.06	11.66	11.37	10.78	10.78	n.a.
Netherlands	5.88	5.69	6.37	5.62	5.50	5.25	4.95	4.75	4.25	4.12	4.38
Spain	12.27	9.52	8.37	6.73	8.23	6.78	6.67	5.56	5.83	10.17	n.a.
Sweden	11.83	12.49	9.20	9.30	9.49	9.20	9.05	9.20	9.32	9.58	10.70
United Kingdom	9.33	11.49	10.79	10.02	9.07	8.67	8.38	8.38	9.01	8.26	7.98
Australia	12.27	19.40	14.91	11.09	10.47	10.34	10.06	9.92	10.44	9.83	10.40
Japan	4.91	4.91	2.89	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38
New Zealand	13.50	17.62	19.69	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
South Africa	21.94	12.99	8.84	8.72	8.68	8.64	8.85	9.49	9.55	10.51	10.97
Brazil	273.03	379.77	149.00	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mexico	48.67	72.96	104.03	95.47	96.43	110.67	133.04	155.67	153.86	84.48	53.07
Philippines	47.14	16.45	9.55	12.60	12.97	13.18	n.a.	n.a.	n.a.	n.a.	n.a.
Singapore	2.91	2.94	2.10	3.26	3.57	3.69	3.23	2.92	2.97	2.97	3.08

Representative money market rates

bond-equivalent yields on major short-term (mostly 3-4 month) money market instruments other than Treasury bills, at or near end of month

	1984	1985	1986	1987				1988			
	Dec	Dec	Dec	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
United States	8.49	8.02	6.64	7.94	7.58	7.80	7.21	6.90	6.77	6.90	7.20
Canada	10.00	9.40	8.35	9.55	8.50	8.70	8.90	8.65	8.55	8.65	8.94
Belgium	10.85	9.89	7.60	6.79	7.35	7.15	6.95	6.54	6.34	6.24	6.24
France	10.69	9.12	8.37	7.87	8.25	8.62	8.56	8.06	7.44	8.25	7.88
Germany	5.75	4.80	4.85	4.55	4.10	3.80	3.65	3.23	3.28	3.40	3.55
Ireland	15.13	12.00	14.06	9.94	9.25	9.19	8.81	8.62	8.94	8.38	8.13
Italy	16.88	15.13	11.37	12.37	12.00	11.62	11.50	10.75	11.13	11.13	10.38
Netherlands	5.75	5.75	6.19	5.62	5.25	4.94	4.56	4.32	4.06	4.06	4.13
Portugal	24.57	20.71	16.07	14.79	14.66	14.19	n.a.	n.a.	n.a.	n.a.	n.a.
Spain	12.21	10.51	11.79	16.86	15.84	14.44	13.59	12.30	12.01	11.06	n.a.
Switzerland	5.00	4.75	4.50	4.25	4.06	4.06	3.56	1.69	1.81	1.88	2.13
United Kingdom	9.88	12.75	11.25	10.19	9.19	8.87	8.94	8.31	9.38	8.56	8.31
Australia	12.90	19.75	15.10	11.20	12.15	12.00	11.25	10.85	10.93	11.43	11.56
Japan	6.33	7.03	4.34	3.84	3.88	3.90	3.90	3.85	3.80	3.80	3.75
New Zealand	15.00	20.00	24.25	18.90	20.30	16.90	17.70	17.00	17.35	n.a.	17.20
South Africa	22.78	13.35	8.55	8.90	8.90	8.50	8.90	9.60	10.25	10.90	11.85
Chile	20.68	22.42	19.56	26.82	31.37	34.49	15.25	11.35	10.69	21.41	20.84
Hong Kong	8.25	6.50	4.62	6.37	6.19	4.06	1.50	3.00	3.87	4.12	5.13
Indonesia	19.00	15.00	19.50	18.75	17.37	17.50	17.50	17.00	18.50	22.50	18.50
Korea	8.00	8.00	8.00	7.50	7.50	7.50	7.50	n.a.	n.a.	n.a.	n.a.
Malaysia	10.30	8.20	6.00	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Philippines	33.21	14.61	8.31	11.15	11.61	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Singapore	7.00	5.88	3.94	4.75	4.50	4.00	3.25	3.13	n.a.	n.a.	n.a.
Taiwan	7.85	4.10	3.87	3.92	3.23	3.13	3.09	4.12	4.47	n.a.	n.a.

Commercial bank deposit rates

at or near end of month

	1984	1985	1986	1987				1988			
	Dec	Dec	Dec	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
United States	8.34	7.72	6.26	8.00	7.40	7.72	7.10	6.67	6.57	6.69	7.05
Canada	10.05	9.40	8.15	9.60	8.45	8.57	8.40	8.50	8.45	8.60	9.00
Austria	7.50	6.50	5.50	4.60	4.75	4.45	4.25	4.40	4.05	3.90	n.a.
Belgium	10.63	9.63	7.44	6.56	6.60	6.66	6.69	6.31	6.25	6.19	6.00
Denmark	6.00	7.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Finland	5.25	4.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75
France	7.04	6.12	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Germany	5.25	4.40	4.80	3.90	3.90	3.70	3.50	3.20	3.20	3.25	3.40
Ireland	14.63	11.87	13.75	9.00	8.62	9.12	8.62	8.50	8.75	8.25	n.a.
Italy	11.64	13.21	10.69	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	9.50
Netherlands	5.69	5.81	6.06	5.50	5.12	4.81	4.50	4.21	3.94	4.00	4.06
Norway	12.75	12.00	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Portugal	28.00	20.00	15.00	14.50	14.00	14.00	14.00	14.00	13.50	13.50	13.50
Spain	11.64	9.64	8.67	9.02	9.11	9.32	9.48	9.39	9.30	n.a.	n.a.
Sweden	11.45	12.18	9.93	9.70	9.70	9.70	9.45	9.55	9.55	9.95	10.95
Switzerland	4.50	4.50	4.25	4.00	3.81	3.81	3.37	1.44	1.56	1.63	1.88
United Kingdom	9.88	11.75	11.19	10.00	9.12	8.81	8.81	8.75	9.25	8.37	8.13
Australia	12.75	18.80	15.56	12.14	11.25	12.28	n.a.	n.a.	n.a.	n.a.	n.a.
Japan	6.38	7.04	4.55	4.45	4.63	4.46	4.42	4.33	4.41	4.38	4.25
New Zealand	15.25	19.98	23.50	18.75	19.85	16.65	16.85	16.00	n.a.	14.60	15.50
South Africa	22.88	13.20	8.65	9.35	9.35	9.30	10.25	11.20	11.90	11.90	n.a.
Argentina*	31.23	5.40	8.41	18.20	9.10	8.92	14.00	15.12	14.30	17.10	18.10
Brazil	27.00	18.00	220.00	11.00	14.00	15.00	17.50	n.a.	n.a.	n.a.	n.a.
Chile	20.68	23.60	20.98	26.83	30.30	31.53	14.84	11.75	9.25	19.84	17.73
Hong Kong	8.25	6.50	4.62	6.37	6.19	4.06	1.50	3.00	3.87	4.12	5.13
Korea	6.00	6.00	6.00	6.00	6.00	6.00	6.00	n.a.	n.a.	n.a.	n.a.
Malaysia	9.58	7.00	6.33	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mexico	47.45	72.90	94.80	94.20	94.20	103.74	120.35	118.99	118.80	81.88	43.20
Philippines	31.01	12.34	7.75	8.79	8.56	9.50	n.a.	n.a.	n.a.	n.a.	n.a.
Singapore	6.13	5.26	4.00	4.62	4.31	3.69	3.13	3.06	n.a.	n.a.	n.a.
Taiwan	6.50	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	n.a.	n.a.
Venezuela	12.50	8.00	8.00	8.94	8.92	8.95	8.95	8.97	8.94	n.a.	n.a.

*Percent per month.

Domestic government bond yields

long-term issues, at or near end of month

	1984	1985	1986	1987				1988			
	Dec	Dec	Dec	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
United States	11.61	9.49	7.79	9.80	9.04	9.10	8.95	8.42	8.39	8.82	9.07
Canada	11.66	10.04	9.23	11.14	10.21	10.50	10.34	9.74	9.61	10.13	n.a.
Austria	8.03	7.61	7.33	7.00	7.26	7.13	6.89	6.83	6.80	6.71	n.a.
Belgium	11.56	9.60	7.70	8.14	8.32	7.98	8.04	7.58	7.38	7.72	7.72
Denmark	14.60	9.67	11.70	12.59	12.56	11.84	12.05	11.18	10.91	11.22	n.a.
Finland	10.73	10.58	7.80	7.83	7.77	7.64	7.67	7.40	7.40	7.41	n.a.
France	12.70	11.33	9.89	11.06	10.95	10.46	10.57	9.73	9.33	9.61	n.a.
Germany	7.17	6.57	6.25	6.86	6.62	6.46	6.51	6.50	6.28	6.30	6.47
Ireland	14.90	11.84	12.97	11.30	11.05	10.23	10.45	10.61	10.41	10.12	n.a.
Italy	14.52	13.66	10.05	11.30	11.41	11.25	10.50	10.29	10.30	n.a.	n.a.
Netherlands	7.72	6.96	6.40	6.81	7.05	6.37	6.32	6.17	5.99	6.01	6.21
Norway	12.00	13.00	13.24	12.78	12.69	12.88	13.11	13.07	n.a.	n.a.	n.a.
Portugal	22.23	16.84	14.49	15.50	15.30	15.60	14.80	n.a.	n.a.	n.a.	n.a.
Spain	13.93	12.52	10.36	14.26	14.24	13.34	13.14	12.48	11.91	11.82	n.a.
Sweden	12.04	12.11	10.66	12.02	11.42	11.51	11.39	11.30	10.96	11.05	11.41
Switzerland	4.60	4.42	4.05	4.33	4.12	3.86	3.95	3.94	3.93	4.08	3.95
United Kingdom	10.25	10.35	10.17	9.85	9.22	9.23	9.47	9.26	9.10	8.96	9.14
Australia	13.50	14.85	13.40	12.50	13.65	13.30	12.85	12.40	12.30	11.90	11.54
Japan	6.47	5.92	4.61	5.72	4.58	5.00	4.88	4.23	4.36	4.43	n.a.
New Zealand	16.90	17.00	16.00	15.55	15.70	14.90	14.30	14.00	13.30	13.08	n.a.
South Africa	16.55	18.09	15.06	15.12	15.44	15.30	15.70	16.80	16.52	16.60	16.51
Philippines	18.54	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.a.	n.a.
Venezuela	14.00	12.00	12.00	12.50	12.50	12.50	12.50	n.a.	n.a.	n.a.	n.a.

Commercial bank lending rates to prime borrowers

at or near end of month

	1984	1985	1986	1987				1988			
	Dec	Dec	Dec	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
United States	10.75	9.50	7.50	8.75	9.00	8.75	8.75	8.50	8.50	8.50	8.50
Canada	11.25	10.00	9.75	10.00	9.75	9.75	9.75	9.75	9.75	9.75	10.25
Austria	9.25	9.00	9.00	8.50	8.50	8.50	8.25	8.25	8.25	8.25	n.a.
Belgium	14.00	11.50	9.75	8.75	8.75	8.75	8.75	8.75	8.50	8.50	8.50
Denmark	10.50	8.50	8.00	9.50	9.50	9.50	9.50	9.50	9.50	9.50	n.a.
Finland	10.68	10.37	8.81	8.95	8.97	9.02	8.99	9.03	9.05	n.a.	n.a.
France	12.00	10.60	9.45	9.45	9.45	9.45	9.45	9.45	9.45	9.45	9.45
Germany	7.75	7.25	6.75	6.25	6.25	6.25	6.25	6.00	6.00	6.25	6.25
Ireland	15.75	12.50	15.75	12.00	12.00	12.00	11.50	11.50	11.50	11.50	11.25
Italy	18.00	15.88	13.00	13.00	13.00	13.00	13.00	12.50	12.62	12.62	12.63
Netherlands	6.25	6.25	7.12	5.62	5.50	5.25	4.87	4.62	4.06	4.12	4.19
Norway	13.00	12.40	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Portugal	29.00	22.50	17.50	19.50	18.50	18.50	18.50	18.50	18.00	18.00	18.00
Spain	15.84	14.75	14.22	16.69	16.48	16.38	16.34	16.10	15.76	15.42	n.a.
Sweden	14.50	15.05	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50
Switzerland	6.00	6.00	5.75	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
United Kingdom	9.50	11.50	11.00	10.00	9.50	9.00	8.50	8.50	9.00	8.50	8.00
Australia	14.00	21.00	18.50	14.50	14.00	13.75	14.00	13.50	13.50	13.50	n.a.
Japan	5.50	5.50	3.75	3.37	3.37	3.37	3.37	3.37	3.37	3.37	3.38
New Zealand	14.00	21.00	23.00	21.00	22.50	19.75	18.75	18.75	n.a.	n.a.	n.a.
South Africa	24.00	16.50	12.00	12.50	12.50	12.50	12.50	13.00	13.00	14.00	14.00
Argentina*	32.05	7.30	11.30	20.00	9.80	9.98	14.80	15.80	15.00	17.60	17.92
Brazil**	31.00	19.00	250.00	15.00	18.00	18.00	19.50	n.a.	n.a.	n.a.	n.a.
Chile	60.82	33.34	29.13	33.12	37.33	40.20	30.99	21.22	20.51	25.49	31.64
Hong Kong	11.00	7.00	6.50	7.50	6.50	6.00	5.50	5.25	6.00	6.00	6.50
Indonesia	23.50	18.75	19.75	22.00	21.00	20.50	20.50	20.50	20.50	20.50	21.00
Korea	10.00	10.00	10.00	10.00	10.00	10.00	10.00	n.a.	n.a.	n.a.	n.a.
Malaysia	12.00	10.50	10.00	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mexico	47.54	85.66	95.33	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Philippines	44.00	15.00	10.50	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Singapore	9.40	7.20	6.10	6.10	6.10	6.10	6.10	5.98	5.93	5.85	n.a.
Taiwan	10.00	9.50	9.00	9.00	9.00	9.00	9.00	9.00	9.00	n.a.	n.a.
Venezuela	18.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	n.a.	n.a.

*Percent per month.

**Spread above monetary correction until Feb 86; nominal rate of interest until Jan 87; spread above LBC rate thereafter.

Domestic corporate bond yields

long-term issues, at or near end of month

	1984	1985	1986	1987				1988			
	Dec	Dec	Dec	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
United States	12.25	10.15	8.88	10.75	10.25	10.30	9.90	9.38	9.45	9.85	10.25
Canada	12.42	10.74	10.18	11.81	11.22	11.32	11.00	10.55	10.20	10.55	10.97
France	12.94	11.76	10.18	11.07	11.28	10.96	10.92	10.38	9.91	10.03	n.a.
Germany	7.20	6.90	6.50	6.80	7.00	6.70	6.70	6.70	6.70	6.60	6.60
Netherlands	7.51	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.
Spain	18.32	14.92	13.40	17.39	17.93	17.08	16.15	15.79	14.68	14.78	n.a.
Sweden	12.33	13.25	11.99	n.a.	12.78	12.36	12.31	12.20	11.83	11.94	12.20
Switzerland	5.09	4.93	4.72	4.72	4.87	4.65	4.60	4.50	4.39	4.39	4.29
United Kingdom	11.64	11.47	11.71	11.43	10.75	11.11	11.11	10.76	10.82	10.66	10.55
Japan	7.10	6.79	5.93	6.08	5.95	5.59	5.32	5.06	5.03	4.99	n.a.
Korea	15.00	13.60	12.80	12.80	12.80	12.80	12.80	12.80	n.a.	n.a.	n.a.
Venezuela	18.00	17.00	17.00	18.00	18.00	18.00	18.00	n.a.	n.a.	n.a.	n.a.

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